REMARKS

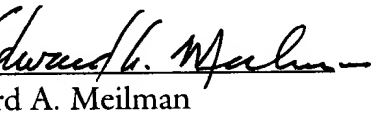
The foregoing amendment to claim 1 is being made to expedite allowance of this case. Basis can be found, inter alia, at page 9, lines 3-10 and in Figure 2.

Claims 1-3, 9 and 12-14 were rejected under 35 USC 103 over Hayashi in view of Solayappan and claims 4-8, 10 and 11 over the same combination in further view of Ogi. It is respectfully submitted that both of these rejections are not applicable to the claims as amended herein and should not be repeated.

Applicant believes that the arguments presented in the amendment filed on January 22, 2003 remain valid and they are hereby incorporated herein by reference. It is again pointed out that the references do not teach or suggest directly introducing an atomized solution into a substrate-containing film-forming chamber which is being maintained at a pressure of about 100 Torr or lower, and forming the complex oxide thin-film on the substrate in the chamber at a temperature of a least the boiling point of the solvent. In the invention, that is accomplished because the nozzle in which the solution is atomized opens into the film-forming chamber. In contrast, the Hayashi patent requires the formation of a colloidal mist which, after being filtered, is flowed into a deposition chamber to deposit a liquid layer on the substrate. As pointed out on the bottom of page 18 of this application, by directly introducing the atomized solution into the film-forming chamber from the two-fluid nozzle, the atomized solution does not need to be carried by a piping or similar apparatus. Hayashi's process, on the other hand, generates the mist which is then allowed to settle in a buffer chamber and filtered before it is introduced into the deposition chamber.

Reconsideration and allowance of this application is respectfully requested.

Respectfully submitted,

By 

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APPENDIX A
Version With Markings To Show Changes Made
37 C.F.R. § 1.121(b)(1)(iii) AND (c)(1)(ii)

CLAIMS:

1. A method of producing a complex oxide thin-film comprising the steps of:

(a) providing a metal compound solution comprising at least two metal compounds dissolved in a solvent;

(b) atomizing the metal compound solution in a two-fluid nozzle having a discharge end in a film-forming chamber, and directly introducing the atomized solution into [a] the film-forming chamber in which the pressure is about 100 Torr or lower and having a substrate therein, and

(c) forming a complex oxide thin-film on a substrate in the film-forming chamber at a temperature equal to or higher than the boiling point of the solvent.

APPENDIX B
"Clean" Version Without Amended/New Indications
37 C.F.R. § 1.121(b)(1)(iii) AND (c)(3)

CLAIMS:

1. A method of producing a complex oxide thin-film comprising the steps of:

(a) providing a metal compound solution comprising at least two metal compounds dissolved in a solvent;

(b) atomizing the metal compound solution in a two-fluid nozzle, and directly introducing the atomized solution into a film-forming chamber in which the pressure is about 100 Torr or lower and having a substrate therein, and

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(c) forming a complex oxide thin-film on a substrate in the film-forming chamber at a temperature equal to or higher than the boiling point of the solvent.

2. A method of producing a complex oxide thin-film according to claim 1, wherein the solution is atomized in the two-fluid nozzle with an oxidative gas.

3. A method of producing a complex oxide thin-film according to claim 2, wherein the solvent has a boiling point of at least 100° C under ordinary pressure.

4. A method of producing a complex oxide thin-film according to claim 3, wherein at least one of the metal compounds is a dipivaloylmethanato complex.

5. A method of producing a complex oxide thin-film according to claim 4, wherein at least one of the metal compounds is an acetylacetonato complex.

6. A method of producing a complex oxide thin-film according to claim 5, wherein the solution contains three metal compounds and at least one of the metal compounds is a metal alkoxide.

7. A method of producing a complex oxide thin-film according to claim 6, wherein the film-forming (c) is performed at least two times, and after each film-forming, the film is heat-treated under a pressure lower than that employed for the film forming.

8. A method of producing a complex oxide thin-film according to claim 7, wherein at least the film obtained after the final-forming is heat treated at an oxygen gas partial pressure higher than an oxygen gas partial pressure existent during film-forming.

9. A method of producing a complex oxide thin-film according to claim 1, wherein the solvent has a boiling point of at least about 100° C under ordinary pressure.

10. A method of producing a complex oxide thin-film according to claim 1, wherein at least one of the metal compounds is a dipivaloylmethanato complex.

11. A method of producing a complex oxide thin-film according to claim 1, wherein at least one of the metal compounds is an acetylacetonato complex.

12. A method of producing a complex oxide thin-film according to claim 1, wherein at least one of the metal compounds is a metal alkoxide.

13. A method of producing a complex oxide thin-film according to claim 1, wherein the film-forming is performed at least two times, and after each film-forming, the film is heat-treated under a pressure lower than that employed for the film-forming.

14. A method of producing a complex oxide thin-film according to claim 1, wherein at least the film obtained by the final film-forming is heat treated at an oxygen gas partial pressure higher than an oxygen gas partial pressure existent during film-forming.